



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,513	12/14/2001	Maynard Grimm	MGJW-B01-Prv	8238
7590	01/25/2005		EXAMINER	
J. Carl Cooper Pixel Instruments Corp. 110 Knowles Drive Los Gatos, CA 95032-1828			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,513	GRIMM ET AL.	
	Examiner	Art Unit	
	Laura A Grier	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 5/4/04.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) 10 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 1, line 11, recites, "...audible and/or visible monitoring...". There is insufficient antecedent basis for this limitation.

Claim Objections

2. Claim 10 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 9. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 2 recites the limitation "said elements" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1-2, 4-5, 7-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Asakura et al., U. S. Patent No. 6681018.

Regarding **claim 1**, Asakura et al. (herein, Asakura) discloses an audio signal processor and audio device (figure 1-2). Asakura's disclosure comprise a plurality of audio input devices (16-19) coupled to an amplifier (10) – (col. 6, lines 46-48), which reads on a plurality of audio signal inputs; a change-over switch (24) – (col. 6, lines 48-51), which reads on a selector for selecting the audio signal which may be present at one of the said inputs; a DSP (23) – (col. 6, lines 61-67 and col. 7, lines 1-4), which reads on a signal processing section responsive to process said selected signal to provided a processed signal; a plurality loudspeaker (7), which outputting analog signals (front left and right), which reads on a plurality of output circuits each responsive to said processed signal to output said processed signal in a discrete known form,;

display unit (40) coupled with a system controller (30) – col. 7, lines 30-59 for displaying the selected signal and changes made therein and speakers (7, 51 and 52) are provided for indicating the audible changes of sound effects, which reads on a monitor circuit responsive to the selected signal and said processed signal to provide audible and/or visible monitoring thereof.

Regarding **claim 2**, Asakura discloses everything claimed as applied above (see claim 1). Asakura inherently discloses parameters established in manufacture and/or by an operator in which the selector and signal processing section operates in response the parameter such that selecting and processing may be changed automatically in response to a least one signal present an input as evident by the fact that when a digital audio input device (11) is selected a switch 22 is used to select the desired audio signal and is processed by the DSP, and when an analog audio input device is selected a switch (24) is used to select an analog audio signal, wherein the analog signal requires a conversion to a digital signal prior to adequate processing in the DSP; and further the use of the DSP, itself, indicates established parameters for efficient and adequate processing the of the various signal input thereto.

Regarding **claim 3**, Asakura discloses everything claimed as applied above (see claim 1). Asakura inherently discloses including a mixer for mixing a second signal with the selected signal as evident by the fact that use of the optical input units and a center speaker or center channel is disclosed in conjunction with amplifier processing audio and video signals, wherein the center channel provides the speech or voice signals, particularly for movies, when using the headphones (8)- col.10, lines 21-36 and col. 11, lines 1-10).

Regarding **claim 4**, Asakura discloses an audio signal processor and audio device (figure 1-2). Asakura's disclosure comprise a plurality of audio input devices (16-19) coupled to an

Art Unit: 2644

amplifier (10) – (col. 6, lines 46-48), which reads on a plurality of audio signal inputs; a change-over switch (24) – (col. 6, lines 48-51), which reads on a selector for selecting the audio signal which may be present at one of the said inputs; a DSP (23) – (col. 6, lines 52-53), which reads on a signal processing section responsive to process said selected signal to provide a processed signal; a plurality of loudspeaker (7, 51 and 52) outputting analog signals comprising left and right signals (front signals), or left and right rear signals and a subwoofer (figure 3), which reads on a plurality of output circuits each responsive to said processed signal to output said processed signal in discrete known forms (specifically, left and right signals are distinct from each other, but produces the same signal); display unit (40) coupled with a system controller (30) – col. 7, lines 30-59 for displaying the selected signal and changes made therein and speakers (7, 51 and 52) are provided for indicating the audible changes of sound effects, which reads on a monitor circuit responsive to the selected signal and said processed signal to provide audible and/or visible monitoring thereof.

Regarding **claim 5**, Asakura discloses everything claimed as applied above (see claim 1). Asakura inherently discloses parameters established in manufacture and/or by an operator for adequate use of the amplifier device in which the selector and signal processing section operates in response to the parameter such that selecting and processing may be changed automatically in response to at least one signal present at an input as evident by the fact that when a digital audio input device (11) is selected a switch 22 is used to select the desired audio signal and is processed by the DSP, and when an analog audio input device is selected a switch (24) is used to select an analog audio signal, wherein the analog signal requires a conversion to a digital signal prior to adequate processing in the DSP; and further the use of the DSP, itself, indicates

established parameters for efficient and adequate processing the of the various signal input thereto.

Regarding **claims 7 and 8**, Asakura discloses an audio signal processor and audio device (figure 1-2). Asakura's disclosure comprise a plurality of audio input devices (11 and 16-19) coupled to an amplifier (10) – (col. 6, lines 20-48), which reads on a plurality of audio signal inputs; a change-over switch (24) – (col. 6, lines 48-51), which reads on a selector for selecting the audio signal which may be present at one of the said inputs; a DSP (23) – (col. 6, lines 52-67 and col. 7, lines 1-7), which reads on a signal processing section responsive to process said selected signal to provided a processed signal; a plurality loudspeaker (7, 51 and 52) – col. 7, lines 18-25, for outputting analog signals comprising left and right signals (front signals), or left and right rear signals and a subwoofer (figure 3) and a digital output (5) response to the digital audio input of device (11), which reads on a plurality of output circuits each responsive to said processed signal to output said processed signal in discrete known forms, with at least one output being an analog signal and at least one being digital; display unit (40) coupled with a system controller (30) – col. 7, lines 48-59 for displaying the selected signal and changes made therein and speakers (7, 51 and 52) are provided for indicating the audible changes of sound effects, which reads on a monitor circuit responsive to the selected signal and said processed signal to provide audible and/or visible monitoring thereof.

Regarding **claim 6**, Asakura discloses everything claimed as applied above (see claim 4). Asakura inherently discloses including a mixer for mixing a second signal with the selected signal as evident by the fact that use of the optical input units and a center speaker or center channel is disclosed in conjunction with amplifier processing audio and video signals, wherein

the center channel provides the speech or voice signals, particularly for movies, when using the headphones (8)- col.10, lines 21-36 and col. 11, lines 1-10).

Regarding **claim 9**, Asakura discloses everything claimed as applied above (see claim 7 or 8). Asakura inherently discloses using parameters established by an operator for adequate operation of the amplifier device in which the selecting and processing an audio signal input changes automatically in response to a least one signal present an input as evident by the fact that when a digital audio input device (11) is selected a switch 22 is used to select the desired audio signal and is processed by the DSP, and when an analog audio input device is selected a switch (24) is used to select an analog audio signal, wherein the analog signal requires a conversion to a digital signal prior to adequate processing in the DSP.

Response to Arguments

Applicant's arguments, see pages 8-9, filed 5/4/04, with respect to the rejection(s) of claim(s) 1-6 under 35 U. S. C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Asakura et al.

The applicant essentially argued the prior art of record failed to disclose the claimed invention in respect to the plurality of outputs of the processed signal output the same signal, and being of known distinct form(s) - (claims 1 and 4); using parameters determined in manufacture and/by an operator, wherein the response of the parameters provides an automatic change in selecting and processing of an audio signal at input (claims 2 and 5), and providing mixing element to mix and second audio signal to the selected signal(claims 3 and 6). A new reference

Art Unit: 2644

of prior art, Asakura et al., has been provided by disclosing teachings of a plurality of audio devices input to amplifier, where a specific audio signal is selected by change-over switching which is output to a DSP processor to provide an analog output via a DAC to a plurality of speakers, wherein the output signal is the same as the selected processed signal; and the audio signal of a digital audio input device may also be output to a digital output for recording, to disclose distinct known forms of the audio signal output; and includes a display for monitoring the changes or processing of the audio signal provided to the DSP to acquire the desired sound effect enhancements for output to the speakers. Further, Asakura inherently discloses the use of established parameters for enabling an automatic change in the selecting and processing techniques of the invention and mix a second signal to the selected signal.

In regards to the applicant's arguments of the lack of antecedent basis for the and/or language of claim 1, the specification object is maintained. Page 13, lines 15-16 only refers to audible monitoring.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura A. Grier
January 24, 2005